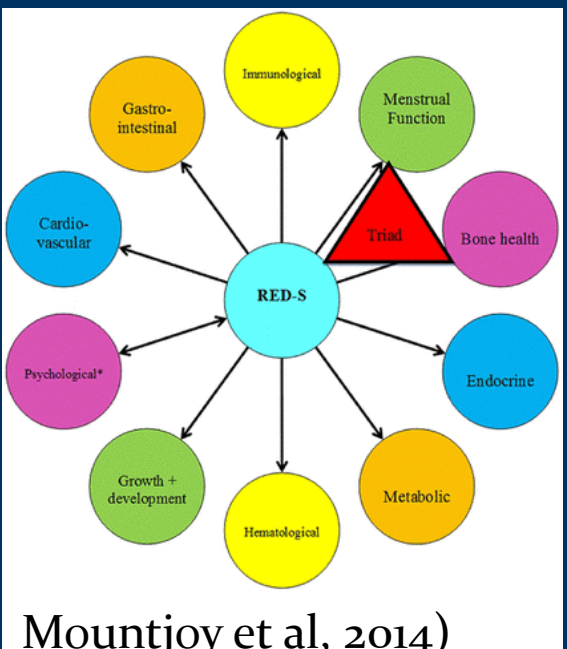


“I’d got self-destruction down to a fine art”: Exploring the lived experience of low energy availability in athletes and exercisers

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1. Background

- Low energy availability (LEA) occurs when energy intake is insufficient to support optimal physiological functioning after exercise energy expenditure has been considered (Loucks, 2007)
- LEA was identified as the antecedent of the Female Athlete Triad syndrome, which is a spectrum of health and disease with clinical manifestations of eating disorders, amenorrhea, and osteoporosis (Nattiv et al, 2007)
- The consequences of LEA have been more recently captured by the broader Relative Energy Deficiency in Sport (RED-S) model (Mountjoy et al., 2014)
- To date, the majority of research has focused on physiological factors and employed quantitative methods, with little research concerning the lived experience of LEA

2. Aim and Method

- Aim:** To qualitatively explore the lived experience of LEA in sport and exercise participants
- Thirteen sport and exercise participants (female $n = 11$, male $n = 2$; M age = 31.15 years) with previous or current experience of LEA participated
- Participants took part in semi-structured interviews (face to face $n = 9$; Skype $n = 4$) concerning their experiences of LEA (M length = 53 minutes)
- Interviews were transcribed verbatim and analysed in accordance with principles for the phenomenological psychological method

3. Results

The lived experience of low energy availability		
Onset	Presentation	‘Recovery’
<p>Psychological and situational stressors</p> <ul style="list-style-type: none">Distorted body imageDE behaviour/clinical ED diagnosisPerceived need for controlStressful life events <p>Increased exercise Energy expenditure</p> <ul style="list-style-type: none">Increases in structured exercise trainingExcessive recreational exercise <p>External pressures</p> <ul style="list-style-type: none">External appraisals of physiqueCoach beliefs and commentsSport-specific pressures <p>“ In your head, to be bigger isn’t perfect...you look at other people and think “oh, they’re really good runners and they’re slim”...and you’d want to be like them ”</p>	<p>Disordered eating/eating disorders</p> <ul style="list-style-type: none">Restrictive eatingCompensatory behaviours to counter EITransactional relationship with food <p>A psychological warzone</p> <ul style="list-style-type: none">AnxietyDepressionVulnerabilityWithdrawal <p>A body thrown into disarray</p> <ul style="list-style-type: none">Menstrual dysfunctionBony stress injuriesFatigue and weaknessDecreased immunityGastrointestinal impairmentsThermoregulatory concernsHormonal imbalance <p>Exercise as a compulsion</p> <ul style="list-style-type: none">Obsessive exerciseA vehicle for further energy expenditure <p>Personality characteristics</p> <ul style="list-style-type: none">High achieving naturePerfectionist tendenciesPoor self-worth <p>Professional education and support</p> <ul style="list-style-type: none">Negative experiences of professional education/supportPositive experiences of Dietetic support	<p>Navigating the tightrope to recovery</p> <ul style="list-style-type: none">Influence of significant othersSocial comparison <p>A continuous tug of war</p> <ul style="list-style-type: none">Situational pressuresDenial/downplaying of perceived consequencesPsychological conflict <p>“ I have to fight on a daily basis still... with exercise and how much I should be doing... how much is acceptable, how much is too much... giving myself the day off. Fuelling adequately, trying with this constant battle going on in my head ”</p>

4. Conclusions

- Findings substantiate the existing evidence base with regard to: LEA development; pertinent characteristics of the LEA experience; and factors that facilitate or hinder recovery progress, thus providing novel insights from the perspective of information-rich cases.
- This study sheds light on the importance of education and awareness of LEA in future prevention and management of the condition and the value of a robust, multi-faceted support network to facilitate resumption of optimal EA and recovery from its individual associated effects.

5. References

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